

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference RAJ-0013.PCT	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/SE2004/001445	International filing date (<i>day/month/year</i>) 10.10.2004	Priority date (<i>day/month/year</i>) 11.10.2003
International Patent Classification (IPC) or national classification and IPC See Supplemental Box		
Applicant ABSORTECH ASIA PACIFIC PTE LTD et al		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
 - a. ☐ (*sent to the applicant and to the International Bureau*) a total of _____ sheets, as follows:

☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - b. ☐ (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input checked="" type="checkbox"/> | Box No. VIII | Certain observations on the international application |

Date of submission of the demand 10.05.2005	Date of completion of this report 24.11.2005
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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE2004/001445

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Cover sheet

B65D 90/38 (2006.01)

B65D 88/12 (2006.01)

B65D 88/74 (2006.01)

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE2004/001445

Box No. I Basis of the report

1. With regard to the language, this report is based on:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rules 12.3(a) and 23.1(b))
- ☐ publication of the international application (Rule 12.4(a))
- ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the claims:
- pages _____ as originally filed/furnished
- pages* _____ as amended (together with any statement) under Article 19
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the drawings:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE2004/001445

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>3-15, 17-21</u>	YES
	Claims	<u>1, 2, 16, 22</u>	NO
Inventive step (IS)	Claims	<u>3, 4, 7-12, 18-21</u>	YES
	Claims	<u>1, 2, 5, 6, 13-17, 22</u>	NO
Industrial applicability (IA)	Claims	<u>1-22</u>	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Most relevant documents cited in the International Search Report:

D1: US 4499820 A
D2: US 3568588 A
D3: US 3332336 A
D4: US 2643602 A
D5: US 2040798 A
D6: US 3456834 A
D7: WO 0226594 A1

Explanation

The invention relates to an apparatus for attenuating the exchange of air in a freight container with the surrounding atmosphere as a result of pressure differences. By using the invented apparatus no damp will be formed that would be harmful to humid-sensitive cargo.

Claim 1

D1 discloses a breather bag construction for a sealed storage structure, whereby the bag regulates the pressure in the storage structure, which is suitable for storing for instance grain. It is well known that such products should be stored at low humidity. The known construction comprises a flexible bag 2 that delimits a volume in the storage structure. Grain in the storage structure is provided outside the bag. The volume inside the bag 2 is connected to the atmospheric pressure while the outer part of the bag is influenced by the pressure inside the storage structure.

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Supplemental Box

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The bag 2 will contract or expand depending on the pressure differences and will thus level out the pressure differences. Several bags 2 can be used in order to increase the effectiveness. D2-D4 disclose similar devices.

Claim 1 in the application states that the invented apparatus is used in a freight container. The breather bag construction in D1 appears to be well suited for a freight container even if this is not mentioned. Also the devices in D2-D4 appear to be well suited for freight containers.

The apparatus according to claim 1 is thus already known from either of D1-D4.

D5 (see claim 1 and the figures) discloses a jar for edible products. The jar, which is well suited for being transported and is a kind of container, is provided with a flexible and airtight sealing member over its opening. The sealing member protrudes inwardly or outwardly depending on the pressure difference between the atmospheric pressure and the pressure in the jar. D5 is of special interest for the embodiment shown in figures 9-11 and is considered to anticipate the apparatus according to claim 1 because of its general wording.

The apparatus according to claim 1 therefore lacks novelty.

Claim 22

As already mentioned the jar in D5 is a kind of container that can be transported. The freight container according to claim 22 is thus known from D5 and therefore lacks novelty.

Furthermore, claim 22 is considered to lack inventive step for the following reasons:

D6 (see abstract; column 1, lines 37-46; and column 2, lines 38-45) discloses a condensation-detering container, which can be a mobile container. The container is provided with an apparatus for deterring the formation of condensation in containers, which might hold for instance grain.

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: V.

D7 (see page 4, lines 13-21) discloses a freight container that is provided with a flexible plastics sheet 7 that extends across the access opening and greatly seals the atmosphere in the container from the outside when the doors are closed.

As mentioned earlier the breather bag construction in, e.g., D1 is considered well suited for freight containers. The person skilled in the art would realise that the container known from either of D6 or D7 easily can be modified with such a breather bag construction.

The container according to claim 22 therefore lacks inventive step over D6 or D7 in combination with e.g. D1.

Claims 2 and 16

The apparatus according to claims 2 and 16 is considered to lack novelty over D1 or D2.

Claims 5,6,13-15 and 17

The apparatus according to claims 5,6,13-15 and 17 is considered obvious to the person skilled in the art in light of either of D1-D4.

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

According to PCT Article 6 a claim shall be clear and concise. Claims 16, 20 and 21 seem unclear.

Claim 16:

How can the claimed apparatus comprise multiples of itself ? It is not clear how the apparatus in claim 16 is construed. (It is however understood that a container may be provided with several apparatuses which together form a first volume)

Claims 20 and 21:

In claims 20 and 21 the feature "fixation means" is mentioned. It is not clear if this feature refers to the fixation means for sealing the membrane, mentioned in claim 18, or the fixation means mentioned in claim 8.

Claims shall preferably be provided with reference signs (PCT Rule 6.2(b)).

It appears appropriate to formulate at least the independent claims with a preamble and a characterizing portion in the way suggested in PCT Rules 6.3(b)(i) and 6.3(b)(ii).